



PABLO DELCAN

Connectivity

Can China Contain Bitcoin?

It is trying. But the cryptocurrency is bigger than any country, even the one where it has been most popular.

by Emily Parker December 11, 2017



It was only a matter of time before Bobby Lee, CEO of China's longest-running Bitcoin exchange, found himself in the crosshairs of Chinese regulators. His exchange, BTCC, had occupied a gray area of Chinese law, neither licensed nor explicitly illegal. Bitcoin is a decentralized

digital currency that can be sent electronically around the world, and its growing popularity made Chinese authorities nervous. In 2016, **most Bitcoin trades worldwide** were in Chinese yuan.

In January 2017, BTCC was investigated by China's Central Bank. In September, China announced that it was banning **initial coin offerings** (ICOs), a popular fund-raising method for startups that use digital coins or tokens. Even then, Lee thought exchanges like his were safe. Later that month, Chinese regulators made it clear that BTCC and other domestic virtual-currency exchanges had to close, an attempt to make it harder for the general public to enter the market and buy bitcoins.

Lee says that he was neither shocked nor panicked, just dismayed. “Ah, finally, the party’s over,” he thought. “The party has to end sometime.”



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Bitcoin, introduced by a mysterious and since vanished character named Satoshi Nakamoto, came into the world around the time of the 2008 financial crisis. The fact that it was not backed by any central authority appealed to those who distrusted governments and big banks. Since then, the currency's rise—especially its popularity among speculators, who helped push the value of one bitcoin from under \$1,000 to more than \$10,000 during 2017—has presented governments with a challenge. Should they allow this new kind of money, even though it

makes it easy for people to send funds relatively anonymously—a feature that is attractive to money launderers and other criminals? Should they try to suppress it, in hopes of maintaining full control over monetary policy? Or should they embrace it, as the Japanese government has done, even passing a law to recognize Bitcoin as a legal payment method?

Bitcoin transactions are recorded on a blockchain, which is a public, censor-proof ledger that is continually being updated by a network of computers throughout the world. The decentralized nature of virtual money should make it impossible for any one country to shut it down. China's crackdown put that foundational belief to the test. The news of BTCC's shutdown briefly **caused the price of a bitcoin to plunge**. China, after all, is known for trying to control seemingly uncontrollable things. Beijing has been surprisingly effective at fencing off the Internet with an army of censors and a Great Firewall that blocks sites like Facebook and Twitter, and yet its online communities and commerce flourish. China is now developing **its own digital fiat currency**, an apparent attempt to make financial transactions cheaper and more traceable, as well as to combat counterfeiting.

“The party has to end sometime.”

None of this would seem to bode well for Bitcoin. Yet weeks after the crackdown, nearly everyone I spoke to in China's cryptocurrency community was in strikingly good spirits. They were optimistic about the future of Bitcoin and other virtual currencies in China, whose crackdown wasn't as all-encompassing as it might have seemed.

Speed limits

China's cryptocurrency world resembles a Silicon Valley of the East. People dress casually, work in shared maker spaces, and scribble on whiteboards. They are global, ready to jump on a flight to New York or Tokyo to seek out a business opportunity. "It reminds me of the Internet community in 1995. Everyone knows each other," says Gao Dongliang, a blockchain investor. Similar to early devotees of the Internet, Gao explains, people in China's blockchain community share a belief in a world-changing technology.

One member of this community is Lu Bin, the CEO of a Shanghai-based blockchain startup called Andui. The energetic Lu, who got a PhD from Louisiana State University, says he helped come up with the term *yitaifang*, the Chinese name for Ethereum, a Bitcoin-inspired virtual-currency network built for more complicated financial transactions.

In late August Lu did an ICO to raise money for Bihu.com, a communications platform that uses blockchain technology. In ICOs, startups issue a new virtual token to the public, sometimes on the premise that the token will be necessary for use of the startup's product. High demand for that product should, in theory, make these virtual tokens gain value. Bihu.com aimed to be like Twitter or Reddit, except that users could reward good content with "keys," the platform's own token.

Lu was thrilled by Bihu's ICO. He says he raised over \$20 million in a matter of hours. He believed there was no way that venture capital would deliver that kind of result. Then the following month China's ICO ban came down, and Lu had to give all the money back.

He took it in stride. Lu acknowledged there was "frustration within the team" and a general "waste of energy." But nonetheless, he felt that the ICO ban protected average investors against fraud.

In fact, everyone I spoke to in China's cryptocurrency community supported, or was at least sympathetic to, the ICO ban. I repeatedly heard that 90 percent of Chinese ICOs were scams. The whole model, in which you buy tokens to use on a platform that does not yet exist, might never exist, or could be a total flop, can be a magnet for fraudsters.

In China, if something is not explicitly verboten, then it's full speed ahead.

Fraudulent ICOs are not limited to China, of course. In 2017 the U.S. Securities and Exchange Commission **charged two ICOs** that were supposedly backed by investments in diamonds and real estate. Neither had "any real operations," the government alleged. In China, the fraud problem appears to have been exacerbated by the participation of relatively new and inexperienced investors.

Da Hongfei, founder of an **alternative cryptocurrency called NEO**, says the ICO crackdown was necessary for China. NEO had its first ICO in 2014 and has since risen to become one of the top cryptocurrencies in the world by market value, at over \$2.5 billion in December. The company says it offered to refund investors after the ICO ban, but they preferred to keep their NEO tokens.

To illustrate why he supports the ban, Da describes a recent trip he took to Germany. He was struck by the experience of driving on the autobahn, which has no speed limit. Germany is able to do this, he says, because “they have good-quality roads, they have a very strict test for a driver’s license ... Everybody is obeying the traffic rules, and they have very good-quality cars.” He adds, “If we don’t do a speed limit in China, or even maybe the United States, that would be a disaster.”



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China didn’t just impose a speed limit on virtual currency, however. It shut down the entire highway. Perhaps Chinese officials banned ICOs until they figure out how to regulate them. Lu, the entrepreneur who had to return \$20 million to investors, hopes that this is the case. He says ICOs present a new business model in which users are stakeholders in the company, which gives them an incentive to invite their friends to join the platform. Lu believes that the virtual-currency exchanges will reopen but be run by the government. He says China will take regulation cues from the outside world, particularly the United States. The SEC **recently signaled** that it would take a more aggressive stance toward ICOs, perhaps by requiring ventures to register with the commission and disclose extensive information to investors.

For now, Lu will continue to work on Bihu.com from Shanghai, raising capital with private investment. “We are believers,” he says. “We believe the Chinese market is eventually going to open.” If cryptocurrency is going to be a real thing, he says, “China does not want to miss the train.”

Miner threat

Before Bitcoin got too hot in the country, Chinese authorities were cautiously accepting of the technology. In May 2013, state-run CCTV even aired a short documentary about it. That same month, Zennon Kapron notes in his 2014 book, *Chomping at the Bitcoin: The Past, Present and Future of Bitcoin in China*, more Bitcoin wallets—the software that holds and manages people’s private cryptographic keys—were downloaded by computers in China than in the rest of the world put together.

It’s easy to understand why many Chinese people would be attracted to Bitcoin. In China’s heavily regulated financial environment, speculating on the currency represented one of the few investment options for the retail investor, Kapron observes. In 2013, the Shanghai stock exchange had been underperforming for years. Real estate prices were too high for many ordinary people, but you could buy a fraction of a bitcoin for as little as one dollar. By mid-2013, Chinese exchanges were moving more than \$35 million in bitcoins each day.



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The speculative fervor threatened to get out of hand. Beijing was also worried about yuan leaving the country. China caps yuan outflow at \$50,000 per person per year. While it's not clear that large numbers of people were using Bitcoin to evade Chinese capital controls, the potential was there. People in China could buy bitcoins in yuan, sell them on an American exchange, and then withdraw the sum in dollars. In late 2013 Chinese authorities struck back, banning financial services companies from dealing with Bitcoin exchanges. People could no longer withdraw yuan from their bank accounts to directly buy bitcoins on Chinese exchanges.

It wasn't long before Chinese people figured out how to get around this obstacle. Instead of paying exchanges directly from their bank accounts, they used cash to buy vouchers that could then be traded on the exchanges. Alternatively, purchasers could send money to the personal bank account of someone who worked at an exchange.

The latest restrictions are more draconian, with cryptocurrency exchanges now shut down. But once again, workarounds have emerged. Some people have turned to online and offline **peer-to-peer** trading. People can also buy and sell digital currencies on the encrypted messaging app Telegram, which is blocked in China, or by virtual private networks (VPNs) that get around the firewall. People who already own coins can just go online to an exchange that is based overseas. There was even speculation that WeChat, China's massively popular but heavily monitored app.

After all, China did not ban Bitcoin itself, nor did it explicitly prohibit peer-to-peer trading. And importantly, China hasn't banned the mining of bitcoins, in which people have their computers race to solve difficult mathematical problems in exchange for coin rewards. As of September, **more than two-thirds of bitcoins** were made in China. Much of the computer hardware used for mining is manufactured there. Miners use a great deal of computing power, and some Chinese computer clusters used for the process enjoy access to relatively cheap electricity. The growth and dominance of Chinese mining has led to fears among some that the country has **too much influence** over the future development of blockchain technology.

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"People who don't know blockchain or digital currency shouldn't be participating in this market. The risks are too great."

James Gong, cryptocurrency expert

A founder of a pool of miners, a person who goes by the name of Discus Fish, says that China's local governments once encouraged mining, particularly in mountainous areas that produce hydroelectric power. The mines were using energy that would otherwise have gone to waste. Then in September the political environment changed, and he feared some local governments would no longer welcome mining. But others in the mining community were unconcerned. Zhao Qianjie, a vice president of BTCC, notes that the company's mining pool was not influenced by the crackdown on its Bitcoin exchange. And in China, if something is not explicitly verboten, then it's full speed ahead.

Getting around control

What is clear is that China has made it more inconvenient for newcomers to enter the Bitcoin market. But maybe this isn't such a bad thing. At least so would argue James Gong, a Shanghai-based cryptocurrency expert who founded ICOage, an online platform through which ventures could promote and raise money for their ICOs. Launched last January, ICOage closed down in September. He says that most of the ventures on his platform were not Chinese, and that the overseas projects were generally higher in quality than the Chinese ones. "People who don't understand blockchain or digital currency shouldn't be participating in this market," Gong says. "The risks are too great. Raising the threshold for ordinary people to trade digital currency is good for the industry as a whole. Some Chinese people were blindly investing. They would buy anything."



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The cryptocurrency's price is soaring, but the fervor is about more than just an investment opportunity.

Even now, Chinese people who want to trade cryptocurrency are likely to find a way. China is making trading difficult but not impossible. Beijing employs a similar strategy for censoring the Internet. It's possible to use a VPN to jump over the firewall, but for many people it's too much *mafan*, or trouble. Besides, they are happy with domestic platforms like WeChat. Yet even if China introduced its own digital currency, people might be willing to go the extra length to use Bitcoin.

“With Bitcoin, people will be more motivated to get around control,” explains Duan Xin-Xing, former vice president of the global Bitcoin exchange OKCoin and now executive president of the Hangzhou-based blockchain startup 8btc. “The Internet is a network of information; Bitcoin is a network of money. It has real value.”

The word “Bitcoin” may have become more nearly taboo in China, but “blockchain” has not. Han Feng is the Beijing-based cofounder of the Elastos Foundation, which ambitiously plans to build a whole new Internet powered by blockchain technology. This fall, Han planned to teach a Tsinghua University course that would be webcast all over the world. He prepared for months. The camera stands were already arranged. Then the university promoted the course on WeChat and called it “the first course on Bitcoin at Tsinghua University.”

Han was upset by Tsinghua's lack of political instincts. Why would you use the word “Bitcoin” at such a sensitive

Bitcoin presents China with the same challenge that the

time? Sure enough, the online course was canceled, but Han wasn't deterred.

He proceeded to teach the class on

Tsinghua's campus in Beijing under a more politically correct title, "The Smart Economy and Blockchain."

Chinese authorities clearly see blockchain as a technology of the future. Blockchain development **is even** part of the Communist Party's 13th five-year plan. The technology provides a tamper-proof, intermediary-free ledger for payments and various other kinds of transactions. Michael Casey of the MIT Media Lab's Digital Currency Initiative has argued that China sees blockchain as a useful tool for **advancing its regional interests**, especially in trade.

China would prefer to take blockchain without Bitcoin. "The central government wants to use blockchain to ensure the trustworthiness of public and administrative data, but they don't want people to print their own money," says Ben Koo, an engineering professor at Tsinghua University.



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Cryptographers have researched zero-knowledge proofs for two decades, but the technique is only just now poised to redefine the concept of online privacy.

China may also hope to replace Bitcoin with its own digital currency, but Bitcoin enthusiasts in the country, like Bobby Lee, say that China's version would be a "completely different animal." He explains, "It's going to be a controlled, centralized currency that happens to be digital; it happens to have some encryption technologies in it." If the new currency

is subject to the same monetary policies, interest rates, restrictions, limits, and regulations as traditional currency, Lee says, “then it’s going to not compare to something, like Bitcoin, that’s truly free.”

When winter ends

China’s crackdown has demonstrated that no one country can stop Bitcoin. That’s the beauty of the decentralized network: if one nation bows out, others pick up the slack. After China clamped down, much of Bitcoin trading **moved to Japan and South Korea**. “Blockchain is a global technology,” says Han, cofounder of Elastos. “Different functions work in different countries. If you want to exchange, you go to countries with friendly laws, like Japan. If you want customers, you go to China. If you need a technology community, you go to the U.S.”

Not only has the Chinese ban failed to stop Bitcoin, but the price of a bitcoin rebounded and continued to hit record highs. Chinese regulations may even have contributed to the surging price. “When China started regulating Bitcoin, it sent a message that China takes this currency very seriously,” says Yan Chen, CEO of NBL, a service for storing cryptocurrency wallets. “The market sees that Bitcoin is something that governments are afraid of, so it must be really powerful.”

NEO’s Da thinks that China’s crypto community will shrink over the short term, and that there will be a “winter” for some time. But he sees the overall outlook as bright. He believes that Chinese capital controls will not be around forever, and their removal will give the Chinese government one less reason to be wary of Bitcoin.

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Bitcoin presents China with the same challenge that the Internet once did. The Chinese government was initially suspicious of the Web, because letting it in would mean relinquishing some degree of control. But Beijing ultimately decided that keeping the Internet out would be worse, since that would cut China off from the global economy. The dilemma posed by Bitcoin has one key difference: it's way too late to isolate China from the rest of the world. "Bitcoin cannot be forbidden in China," says BTCC's Zhao. "As long as there is one cable available from China to the outside, then Bitcoin will survive."

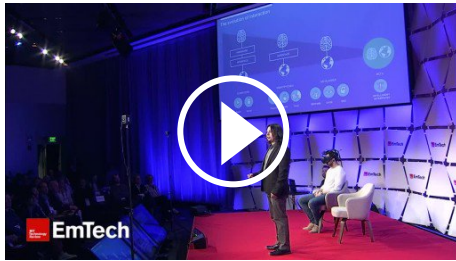
That means for now, Bitcoin has passed the China test. "Bitcoin itself did not break after China banned it," Lee says. The virtual currency has delivered on its promise that it could not be defeated by any government, even one as powerful as China's. Or, as Lee puts it, "Every time you try to whack Bitcoin and it doesn't die, it becomes stronger."

*Emily Parker has covered China for the Wall Street Journal and served as an advisor in the U.S. State Department. She is the author of **Now I Know Who My Comrades Are: Voices from the Internet Underground**.*

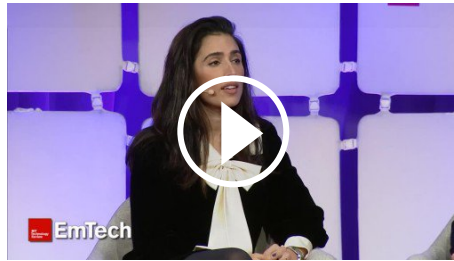
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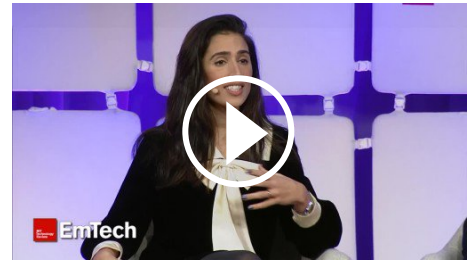
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